



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/732,827	12/10/2003	Ann Marie Przepasniak	KCX-660 (19116)	6772
22827	7590	06/12/2006	EXAMINER	
DORITY & MANNING, P.A. POST OFFICE BOX 1449 GREENVILLE, SC 29602-1449			CHAPMAN, GINGER T	
			ART UNIT	PAPER NUMBER
			3761	

DATE MAILED: 06/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/732,827

Applicant(s)

PRZEPASNIAK ET AL.

Examiner

Ginger T. Chapman

Art Unit

3761

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --****Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 March 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 4 and 7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 6 and 8-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-16 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Status of the claims***

Claims 1-16 are pending in the application, claims 4 and 7 are withdrawn from consideration as being drawn to a non-elected species.

### ***Claim Rejections - 35 USC § 102 / Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-3, 5, 6 and 8-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhao et al (US 6,514,602) in view of Grenier (US 5,613,964).

With regard to claim 1, Zhao discloses an interlabial absorbent article (20) configured for disposition primarily within the vestibule of a female wearer (col. 13, ll. 13-14), comprising: a generally liquid permeable cover sheet (42); a generally liquid impermeable back sheet (38); an absorbent material (44) disposed between the cover sheet (42) and the back sheet (38); wherein the back sheet (38) has a water vapor transmission rate that is at least about 20% of a water vapor transmission rate of the cover sheet (col. 7, ll. 39-42 and col. 23, ll. 37-38). Zhao discloses at column 7, ll. 52-55 that the backsheet usually can comprise the following: 1. a biodegradable layer, 2. a water-soluble layer and 3. a water-permeable layer, where the biodegradable layer is a breathable water-impervious garment side layer and the permeable layer contacts the core (c. 15, ll. 61-63), the soluble layer is disposed between the biodegradable layer and the permeable layer (c. 7, ll. 52-55).

Zhao discloses the desirability of being able to flush used menstrual articles down the toilet for disposal without clogging the toilet or sewer pipes (col. 1, ll. 50-60) and discloses that such an article is flushable due to the inherent properties of water-dispersible polymers (col. 2, ll. 30-31) and that the disintegration rate of the article when flushed can be controlled (col. 2, ll. 55-58). Zhao discloses at column 9, ll. 22-42 that the water-permeable layer controls the rate at which body fluids and water contact the water-soluble layer, and the thickness of the water-soluble layer controls the rate at which the article loses integrity when flushed down a toilet (c. 7, ll. 59-64) and at column 10, ll. 4-11 that the desired liquid control properties, i.e., flushability, can be varied by varying the amount of water-soluble polymer in the water-soluble and water-permeable layers thereby controlling the rate at which the interlabial article disintegrates when flushed down a toilet for disposal, while the biodegradable layer maintains the integrity of the article during wear (col. 8, ll. 17-18; ll. 50-52) and is breathable (col. 7, ll. 39-42).

Zhao discloses the coversheet can be the reverse order laminate such that the breathable biodegradable layer is at the body side (c. 12, ll. 24-30), adjacent the soluble layer with the permeable layer contacting the core. Zhao discloses the water vapor transmission rate, i.e. breathability, for the backsheet and the coversheet can be substantially the same (col. 18, ll. 43-56; Table 5, col. 21, ll. 52-54; Tables 7 and 9, col. 23, ll. 36-38) while varying the thickness of the water-soluble layer and the percent polymer to obtain desired water-permeability, i.e. flushability, characteristics; thus Zhao discloses the article having the claimed backsheet and coversheet vapor transmission rate percents.

Zhao does not expressly disclose the contact angle mismatch but does disclose the cover sheet and said back sheet can be the same material (col. 12, ll. 38-48) and thus would inevitably

and necessarily have a contact angle mismatch of zero, which is encompassed by “less than about 25%” and thus meets the claimed limitation.

Zhao discloses the article substantially as claimed but remains silent on neutral buoyancy. Grenier teaches a disposable absorbent menstrual article having neutral buoyancy. Grenier, at column 2, lines 6-8, expresses the desire for a menstrual article constructed of materials that do not cause problems in plumbing systems when the used menstrual articles are flushed down the toilet for disposal. Grenier teaches at column 12, line 9 that flushability of an absorbent menstrual article is determined by its buoyancy in water and teaches at col. 10, ll. 38-55 that selecting materials such that the menstrual article has neutral buoyancy enables the article to be carried along with other wastes in a moving stream of wastewater before it disintegrates and sinks and thus may be flushed without damaging or clogging plumbing systems, thus providing the clear motivation to provide a menstrual article that can be disposed of by flushing and therefore an article that is neutrally buoyant and permits safe disposal in ordinary toilets (col. 10, ll. 27-31). Therefore it would have been obvious to one having ordinary skill in the art at the time of invention to form the article of Zhao having initial neutral buoyancy as taught by Grenier in order to provide a menstrual article that permits safe disposal when flushed down a toilet.

With regard to claims 2, 5 and 6, Zhao discloses the cover sheet and backsheet materials having a vapor transmission rate are of the type disclosed in the instant specification. Since the materials are identical to that of the instant claims, the cover sheet will inherently have a vapor transmission rate of between 30,000 and 40,000 mocon value.

With respect to Mocon values, i.e. vapor transmission rates expressed as a coversheet Mocon value of about 30,000 to about 40,000 and a backsheet Mocon value of about 10,000;

Art Unit: 3761

Zhao does not perform the claimed test on the coversheet and backsheet and therefore does not disclose results for this test. The interlabial absorbent article of Zhao comprises the same structure and materials disclosed in the instant specification as being a suitable embodiment of the instant invention. Therefore the claimed test results are inherent to the material, and the interlabial absorbent article of Zhao fulfills all limitations of the claim. When the structure of the composition recited in the reference is substantially identical to that of the claims of the instant invention, claimed properties or functions are presumed to be inherent (MPEP § 2112-2112.01). A prima facie case of either anticipation or obviousness has been established when the reference discloses all the limitations of a claim, (in this case, an interlabial article comprising a coversheet, a backsheet, absorbent material disposed between the topsheet and the backsheet) except for a property or function (in the present case, a vapor transmission rate expressed in Mocon values) and the examiner reasonably believes that the reference inherently possesses properties that anticipate or render obvious the claimed invention and thus has a basis for shifting the burden of proof to applicant, as per *In re Fitzgerald*, 619 F.2d 67, 205 USPQ 594 (CCPA 1980).

With regard to claim 3, Zhao discloses the cover sheet (42) comprises a spunlace laminate (col. 14, l. 53) material of rayon and film (col. 10, l. 24).

With regard to claims 8 and 9, The combination of Zhao and Grenier teach the absorbent material has a dry density of at least about 1.0 g/cc and a wet density of at least about 1.0 g/cc (Grenier, col. 11, ll. 66-67 to col. 12, ll. 1-35). Grenier teaches that the density of water is 1.0 g/cc and thus material having about the same density of water, i.e. about 1.0 g/cc, would be neutrally buoyant in water (col. 12, l. 16). Grenier teaches that flushability is determined by

Art Unit: 3761

density, volume and bulkiness (c. 11, l. 66) which determines buoyancy in water and that density of the material improves performance when disposed of by flushing (col. 11, ll. 16-17), and further teaches optimizing these parameters to obtain desired flushability properties, i.e. neutral buoyancy (col. 11, l. 7) in the known process of selecting materials that are intended to be flushed (col. 12, ll. 15-35). Therefore density of the absorbent material is a result effective variable that can be varied to obtain varying buoyancy characteristics. In view of the teachings of Grenier, discovery of the optimum value of density in the process of obtaining an article that is neutrally buoyant in water as taught by Grenier for the flushable menstrual article of Zhao would have been obvious to one having ordinary skill in the art at the time the invention was made, since it has been held that discovery of optimum values of result effective variables in a known process involves only routine skill in the art. *In re Boesch and Slaney*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

With regard to claim 10, Zhao discloses the cover sheet (42) is adhered to the back sheet (38) with an adhesive (col. 16, l. 21) around a circumference of the article (col. 16, l. 16).

With regard to claim 11, Zhao discloses the absorbent material comprises a cotton/rayon blend (col. 15, ll. 43-44).

With regard to claim 12, Zhao discloses an interlabial absorbent article configured for disposition primarily within the vestibule of a female wearer, comprising: a generally liquid permeable cover sheet having a water vapor transmission rate of at least about 30,000 Mocon value; a generally liquid impermeable back sheet having a water vapor transmission rate of at least about 10,000 Mocon value (see claims 2 and 5, *supra*); wherein the water vapor transmission rate of the back sheet is at least about 20% of said water vapor transmission rate of

the cover sheet an absorbent material disposed between the cover sheet and the back sheet (see claim 1, *supra*). Zhao does not expressly disclose absorbent material density. Grenier expresses the desire and clear motivation for the absorbent material density of a flushable menstrual article to be greater than 1.0 g/cc (see claims 8 and 9, *supra*) such that upon being flushed, the article has an initial neutral buoyancy (see claim 1, *supra*) and subsequently sinks within about 7 days and thus may be flushed without damaging or clogging plumbing systems thereby permitting safe disposal in toilets (col. 10, ll. 27-31). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to form to absorbent material of Zhao having density greater than about 1.0 g/cc in order to provide a menstrual article that has initial neutral buoyancy and subsequently sinks and thus may be flushed thereby permitting safe disposal of the soiled article in toilets.

With regard to claim 13. Zhao discloses the cover sheet and said back sheet have a contact angle mismatch of less than about 25% (see claim 1, *supra*).

With regard to claim 14. Zhao discloses an interlabial absorbent article configured for disposition primarily within the vestibule of a female wearer, comprising: a generally liquid permeable cover sheet; a generally liquid impermeable back sheet; an absorbent material disposed between said cover sheet and said back sheet; wherein said back sheet has a water vapor transmission rate that is at least about 20% of a water vapor transmission rate of said cover sheet (see claim 1, *supra*). Zhao remains silent on the dry density of the absorbent material; Grenier expresses the desire and clear motivation for the absorbent material density of a flushable menstrual article to be at least about 1.0 g/cc (see claims 8 and 9, *supra*) such that upon being flushed, the article has an initial neutral buoyancy (see claim 1, *supra*) and thus may be



Art Unit: 3761

flushed without damaging or clogging plumbing systems thereby permitting safe disposal in toilets (col. 10, ll. 27-31); therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to form the article of Zhao having absorbent material density as taught by Grenier in order to provide a menstrual article that does not clog plumbing systems thereby permitting safe disposal of the soiled article when flushed down a toilet.

With regard to claim 15, Zhao discloses the cover sheet and said back sheet have a contact angle mismatch of less than about 25% (see claim 1, *supra*).

With regard to claim 16, Zhao remains silent on buoyancy; Grenier teaches the disposable absorbent menstrual article having an initial neutral buoyancy (see claim 1, *supra*). Grenier, at column 2, lines 6-8, expresses the desire for menstrual articles constructed of materials that do not cause problems in plumbing systems when the used menstrual articles are flushed down the toilet for disposal. Grenier teaches at column 12, line 9 that flushability of an absorbent menstrual article is determined by its buoyancy in water and teaches at col. 10, ll. 38-55 that selecting materials such that the menstrual article has neutral buoyancy enables the article to be carried along with other wastes in a moving stream of wastewater before it disintegrates and sinks and thus may be flushed without damaging or clogging plumbing systems, thus providing the clear motivation to provide a menstrual article that can be disposed of by flushing and therefore an article that is neutrally buoyant and permits safe disposal in ordinary toilets (col. 10, ll. 27-31).

### ***Response to Arguments***

Applicant's arguments filed 20 March 2006 have been fully considered but they are not persuasive.

With regard to independent claims 1, 12 and 14, Applicant submits the following:

I. Because the backsheet and coversheet perform different functions where liquids are concerned, one should not expect them to be structured the same (remarks, p. 7); Zhao discloses that the backsheets may be used as coversheets upon being apertured (remarks, p. 9); and, because the coversheet is water permeable and the backsheet is liquid impervious the coversheet cannot be formed of the same material as the backsheet (remarks, p. 11, last paragraph).

II. Zhao fails to disclose any WVTR (water vapor transmission rate) data for any of the materials identified as being suitable for coversheets or apertured films and only discloses WVTR for backsheets, therefore in the absence of such WVTR data the Zhao reference is incapable of disclosing the WVTR ratios and contact angles of Applicants claims 1, 12 and 14 (remarks, p. 5, last paragraph to p. 6, first paragraph).

III. Zhao discloses a moisture vapor transmission rate test, but fails to provide the relative moisture vapor transmission rate of the backsheet relative to the moisture vapor transmission rate of the coversheet (remarks, p. 10, last paragraph) and thus there is no way to compare the water vapor transmission rate of the backsheet with the coversheet (remarks, p. 10), and Zhao fails to provide data about the contact angles of any materials for the coversheet thus Zhao fails to provide any disclosure of what sort of contact angle mismatch there would be (remarks, p. 12, first paragraph).

These arguments are not persuasive for the following reasons:

I. With respect to the backsheet and coversheet structure, Zhao states at col. 23, ll. 35-40 that the material used as the backsheet can also be used as apertured formed filmed coversheets

for interlabial articles. That the back and cover sheets can comprise the same material is evidenced by Ferguson et al made of record in the previous office action which teaches at col. 1-2, and at c. 5, ll. 45-55:

...disposable catamenial pads for use between periods of menstruation in which the outer wrap is a homogeneous sheet of material having a multiplicity of protuberances comprising debossments in the topsheet and backsheet portions of the outer wrap. The physical characteristics of the debossments in the topsheet portion and of the debossments in the backsheet portion are substantially similar to each other....

Frequently, the prior art outer wraps have a liquid permeable user contacting topsheet and a liquid impermeable backsheet. The materials taught in the prior art for use as topsheets have characteristics which permit liquid to rapidly penetrate their thickness while materials which retard the flow of liquid are suggested for use as backsheets. Because the topsheet and the backsheet components of the outer wrap require liquid handling characteristics which are different from each other, the prior art absorbent articles typically have topsheets and backsheets which are manufactured from materials having different physical characteristics....

In some manufacturing methods and for some product applications, however, it is desirable to use the same, or substantially the same material for both the topsheet and backsheet components.

As used herein the term "homogeneous" refers to outer wraps 12 in which any representative portion thereof is substantially similar to any other representative portion. Accordingly, the physical characteristics (percent open area, size, shape and maximal diagonal of the base openings, size, shape, and maximal diagonal of the apex opening, caliper, etc.) of the topsheet debossments 24 in a representative sample of the topsheet portion 20 will be substantially similar to the physical characteristics of the backsheet debossments 26 in a representative sample of the backsheet portion 22.

Thus the prior art discloses that it is known in the art that the backsheet and coversheet can be structured the same and perform different functions where liquids are concerned.

II and III. With respect to a backsheet water vapor transmission rate that is at least about 20% of a water vapor transmission rate of the coversheet, and a contact angle mismatch of less than about 25%, Zhao does not perform the claimed test on the sheets and therefore does not disclose results for these tests. The article of Zhao comprises the same structure and materials disclosed in the instant specification as being a suitable embodiment of the instant invention. Therefore the claimed test results are inherent to the material, and the absorbent structure of Zhao fulfills all limitations of the claim.

When the structure of the composition recited in the reference is substantially identical to that of the claims of the instant invention, claimed properties or functions are presumed to be inherent (MPEP § 2112-2112.01). A prima facie case of either anticipation or obviousness has been established when the reference discloses all the limitations of a claim, (in this case, an interlabial absorbent article comprising a coversheet, a backsheet, an absorbent material disposed between the coversheet and the backsheet) except for a property or function (in the present case, a MVTR ratio of at least about 20 % and a contact angle mismatch of less than about 25%) and the examiner reasonably believes that the reference inherently possesses properties that anticipate or render obvious the claimed invention and thus has a basis for shifting the burden of proof to applicant, as per *In re Fitzgerald*, 619 F.2d 67, 205 USPQ 594 (CCPA 1980).

Therefore the above rejections were made in the sense of *In re Fitzgerald* or *In re Spada*, 911 F.2d 705, 709, 15 USPQ 1655, 1658 (Fed. Cir. 1990), once the examiner provides a rational

tending the show that the claimed product appears to the same or similar to that of the prior art, although produced by a different process, the burden shifts to Applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product, *In re Marosi*, 710 F.2d 798, 802, 218 USPQ, 289, 292 (Fed. Cir. 1983). Applicants have not presented a valid side-by-side comparison between their interlabial article and that disclosed by the prior art where the only difference is the test results for water vapor transmission rates expressed as Mocon values and contact angle mismatch test results, the burden has shifted to Applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product when tested according to the same procedure as the present invention, *In re Dunn*, 349 F.2d 433, 146 USPQ 489 (CCPA 1965).

Applicants' arguments with regard to dependent claims 2-11, 13 and 15-16 have been fully considered but are not persuasive as Applicants' arguments depend entirely on Applicants' arguments regarding the rejection of claim 1, which have been addressed *supra*.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

Art Unit: 3761

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ginger T. Chapman whose telephone number is (571) 272-4934. The examiner can normally be reached on Monday through Friday 8:30 a.m. to 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tatyana Zalukaeva can be reached on (571) 272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ginger Chapman  
Examiner, Art Unit 3761  
05/30/06

\*\*\*



TATYANA ZALUKAEVA  
SUPERVISORY PRIMARY EXAMINER

